

1	S4 and suction	US-PGPUB; USPAT	2/23/05
10	S30 and S25	US-PGPUB; USPAT	2/23/05
3	S27 not S23	US-PGPUB; USPAT	2/23/05
0	S25 and (sinker)	US-PGPUB; USPAT	2/23/05
29	S25 and (current with time)	US-PGPUB; USPAT	2/23/05
9	S25 and ((diffusion) with time)	US-PGPUB; USPAT	2/23/05
22	S13 and ring	US-PGPUB; USPAT	2/23/05
0	S13 and (sinker)	US-PGPUB; USPAT	2/23/05
2	S13 and (ring with current)	US-PGPUB; USPAT	2/23/05
1	S13 and (corner with diode)	US-PGPUB; USPAT	2/23/05
0	S13 and (corner with current)	US-PGPUB; USPAT	2/23/05
0	S13 and (corner with (gnd or ground))	US-PGPUB; USPAT	2/23/05
1	S13 and ((edge or corner) with time)	US-PGPUB; USPAT	2/23/05
6	S13 and ((diffusion) with time)	US-PGPUB; USPAT	2/23/05
1	S13 and ((annular or concentric or circular) with current)	US-PGPUB; USPAT	2/23/05
2	S10 and (up near2 diffusion)	US-PGPUB; USPAT	2/23/05
2	S10 and (suction adj diode)	US-PGPUB; USPAT	2/23/05
6	(257/443.ccls.) and suction	US-PGPUB; USPAT	2/23/05
0	(257/443.ccls.) and (leakage with (gnd or ground))	US-PGPUB; USPAT	2/23/05
20	(257/443.ccls.) and (current with (gnd or ground))	US-PGPUB; USPAT	2/23/05
6	(257/443.ccls.) and (corner with diode)	US-PGPUB; USPAT	2/23/05
4	("4904861" "4998013" "5408122" "5430321"),pn.	US-PGPUB; USPAT	2/23/05
1	20040222482	US-PGPUB; USPAT	2/23/05
10	5430321	US-PGPUB; USPAT	2/23/05
4	5408122	US-PGPUB; USPAT	2/23/05
10	S47 not S45	US-PGPUB; USPAT	2/24/05
12	S46 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	2/24/05
2	S42 and (leakage with ("between" adj diode))	US-PGPUB; USPAT	2/24/05
0	S32 and (minority with (reduce or reduction or minimizing or minimized or m	US-PGPUB; USPAT	2/24/05
0	S32 and (leakage with sinker)	US-PGPUB; USPAT	2/24/05
0	S32 and (leakage with (reduce or reduction or reducing or minimize or minimized or m	US-PGPUB; USPAT	2/24/05

1	S32 and (leakage with (reduce or reduction or reducing or minimizing or minimized or m	US-PGPUB; USPAT	2/24/05
7	S32 and (leakage with (reduce or reduction or reducing or minimizing or minimized or m	US-PGPUB; USPAT	2/24/05
7	S32 and ((cross\$1talk or (cross adj talk) with diode)	US-PGPUB; USPAT	2/24/05
18	4031607 "3988762"	US-PGPUB; USPAT	2/24/05
1	20040222482 and suction	US-PGPUB; USPAT	2/24/05
16	(minority with ("between" adj diode))	US-PGPUB; USPAT	2/24/05
32	(leakage with ("between" adj diode))	US-PGPUB; USPAT	2/24/05
0	((front\$1side or front) with (illuminate or illumination or illuminating or illuminated)) and	US-PGPUB; USPAT	2/24/05
87	S95 and (substrate.clm.)	USPAT	2/27/05
6	S95 and (@py="2004") and (substrate.clm.)	USPAT	2/27/05
10	S91 and (substrate.clm.)	US-PGPUB; USPAT	2/27/05
28	S88 and (substrate.clm.)	US-PGPUB; USPAT	2/27/05
28	S88 and (substrate.clm.)	US-PGPUB; USPAT	2/27/05
0	S84 and ((cross\$1talk or (cross adj talk) or noise) with (photo\$1diode or (photo adj	US-PGPUB; USPAT	2/27/05
15	S78 not S79	US-PGPUB; USPAT	2/27/05
13	S75 not S72	US-PGPUB; USPAT	2/27/05
9	S73 and (cross\$1talk or (cross adj talk) or noise)	US-PGPUB; USPAT	2/27/05
0	S69 not S67	US-PGPUB; USPAT	2/27/05
3	S64 and ((diode adj (reduce or reduced or reduction or reducing or minimizing or minimi	US-PGPUB; USPAT	2/27/05
3	S64 and ((diode adj (reduce or reduced or reduction or reducing or minimizing or minimi	US-PGPUB; USPAT	2/27/05
3	S64 and ((diode adj (reduce or reduced or reduction or reducing or minimizing or minimi	US-PGPUB; USPAT	2/27/05
1	S64 and ((reduce or reduced or reduction or reducing or minimizing or minimized or mir	US-PGPUB; USPAT	2/27/05
0	S61 not S60	US-PGPUB; USPAT	2/27/05
13	S55 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	2/27/05
25	S32 and (minority with (reduce or reduction or reducing or minimizing or minimized or m	US-PGPUB; USPAT	2/27/05
2	S108 not S104	US-PGPUB; USPAT	2/27/05
4	S105 not55	US-PGPUB; USPAT	2/27/05
1	S105 not S104	US-PGPUB; USPAT	2/27/05
0	(scribe with (cross\$1talk or (cross adj talk) or noise)) and S64	US-PGPUB; USPAT	2/27/05
16	(scribe with (cross\$1talk or (cross adj talk) or noise))	US-PGPUB; USPAT	2/27/05
1	(dummy with (cross\$1talk or (cross adj talk) with (photo\$1diode or (photo adj diode)))	US-PGPUB; USPAT	2/27/05

14	(dummy with (cross\$1talk or (cross adj talk) or noise) with (photo\$1diode or (photo adj	US-PGPUB; USPAT	2/27/05
4	(dummy with (cross\$1talk or (cross adj talk) or noise)) and S99	US-PGPUB; USPAT	2/27/05
5	(dummy with (cross\$1talk or (cross adj talk) or noise)) and S78	US-PGPUB; USPAT	2/27/05
7	(dummy with (cross\$1talk or (cross adj talk) or noise)) and (light.ab.) and ("257"/\$3.cc	US-PGPUB; USPAT	2/27/05
0	(dummy with (cross\$1talk or (cross adj talk) or noise)) and (257/447.ccls.)	US-PGPUB; USPAT	2/27/05
1	(dummy with (cross\$1talk or (cross adj talk) or noise)) and (257/444.ccls.)	US-PGPUB; USPAT	2/27/05
0	(dummy with (cross\$1talk or (cross adj talk) or noise)) and (257/431.ccls.)	US-PGPUB; USPAT	2/27/05
4	(dummy with (cross\$1talk or (cross adj talk) or noise)) and ((photo\$1diode or (photo a	US-PGPUB; USPAT	2/27/05
4	(dummy with (cross\$1talk or (cross adj talk) or noise)) and ((image\$1sensor or image\$	US-PGPUB; USPAT	2/27/05
20	(dummy with (array or matrix) with (photo\$1diode or (photo adj diode)))	US-PGPUB; USPAT	2/27/05
2	((front\$1side or front)) and S49 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	2/27/05
6	("3978343" "5812030" "5828178" "5952883" "6201235" "6246284").PN.	US-PGPUB; USPAT; USOC	2/27/05
10	("3757128" "4259570" "4266125" "4293877" "4341956" "4451731" "4630121"	US-PGPUB; USPAT; USOC	2/27/05
9	((cross\$1talk or (cross adj talk)) with diode with interval)	US-PGPUB; USPAT	2/27/05
4	((cross\$1talk or (cross adj talk)) with (photo\$1diode or (photo adj diode)) with addition:	US-PGPUB; USPAT	2/27/05
9	((cross\$1talk or (cross adj talk)) with (diode or (photo adj diode)) with interval)	US-PGPUB; USPAT	2/27/05
6	((cross\$1talk or (cross adj talk)) with (diode or (photo adj diode)) with (corner or middl	US-PGPUB; USPAT	2/27/05
0	((cross\$1talk or (cross adj talk)) with (array or matrix or surface) with (diodes near spr	US-PGPUB; USPAT	2/27/05
0	((cross\$1talk or (cross adj talk)) with (array or matrix or surface) with (diode near spre:	US-PGPUB; USPAT	2/27/05
13	((cross\$1talk or (cross adj talk)) with (array or matrix or surface) with (diode near spre:	US-PGPUB; USPAT	2/27/05
13	((cross\$1talk or (cross adj talk)) with (array or matrix or surface) with (diode near spre:	US-PGPUB; USPAT	2/27/05
44	((cross\$1talk or (cross adj talk) or noise) near "between") and (257/443.ccls.)	US-PGPUB; USPAT	2/27/05
13	((array or matrix or surface) with (diode near spread))	US-PGPUB; USPAT	2/27/05
7	((dark adj current) near3 (reduce or reduction or reducing or minimize or minimized o	US-PGPUB; USPAT	2/27/05
2	((dark adj current) near3 (array or matrix)) with diodes)	US-PGPUB; USPAT	2/27/05
13	((cross\$1talk or (cross adj talk) near3 (array or matrix)) with diodes)	US-PGPUB; USPAT	2/27/05
12	5602415	US-PGPUB; USPAT	2/27/05
12	5602415	US-PGPUB; USPAT	2/27/05
8	5567976	US-PGPUB; USPAT; USOC	2/27/05
1	S84 and ((photo\$1diode or (photo adj diode)))	US-PGPUB; USPAT	3/1/05
3	S64 and ((diode adj (reduce or reduced or reduction or reducing or minimize or minimi	US-PGPUB; USPAT	3/1/05
9	S44 and ("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	3/1/05

0	S154 not S153	US-PGPUB; USPAT	3/1/05
5	S152 and ((photo\$1diode or (photo adj diode)))	US-PGPUB; USPAT	3/1/05
5	S136 not S135	US-PGPUB; USPAT	3/1/05
18	S128 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	3/1/05
2	S124 and ((photo\$1detector or (photo adj detector)))	US-PGPUB; USPAT	3/1/05
37	S123 and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
4	S119 and ((photo\$1diode or (photo adj diode)))	US-PGPUB; USPAT	3/1/05
37	S118 and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
44	S113 and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
0	S112 not S114	US-PGPUB; USPAT	3/1/05
44	S110 and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
8	(mask with (fish\$1bone or (fish adj bone)))	US-PGPUB; USPAT	3/1/05
2	(257/443.ccls.) and S126	US-PGPUB; USPAT	3/1/05
3	((top) with ("p+" or "p.sup.+")) and S134	US-PGPUB; USPAT	3/1/05
0	((hole) with (doped or doping or dopant or impurity) with sidewall) and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
4	((hole) with (doped or doping or dopant or impurity) with side) and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
0	((hole) with ("p+" or "p.sup.+")) with sidewall) and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
0	((hole) with ("p+" or "p.sup.+")) with sidewall) and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
21	((hole) with ("p+" or "p.sup.+")) with sidewall) and (@ad<"20040311" or @rad<"20040311")	US-PGPUB; USPAT	3/1/05
7	((bottom) with ("p+" or "p.sup.+")) and S145	US-PGPUB; USPAT	3/1/05
1	((bottom) with ("p+" or "p.sup.+")) and S134	US-PGPUB; USPAT	3/1/05
3	((back\$1side or back) with ("p+") and S134	US-PGPUB; USPAT	3/1/05
18	((back\$1side or back) with ("p+") and S132	US-PGPUB; USPAT	3/1/05
8	((back\$1side or back) with ("p+" or "p.sup.+")) and S134	US-PGPUB; USPAT	3/1/05
21	((back\$1side or back or bottom) with ("p+" or "p.sup.+")) and S147	US-PGPUB; USPAT	3/1/05
2	("4903103" "4914301").PN.	US-PGPUB; USPAT; USOC	3/1/05
38	((reduce or reduced or reduction or reducing or minimize or minimized or minimizator or minimizator	US-PGPUB; USPAT	3/1/05
38	((reduce or reduced or reduction or reducing or minimize or minimized or minimizator or minimizator	US-PGPUB; USPAT	3/1/05
15	((reduce or reduced or reduction or reducing or minimize or minimized or minimizator or minimizator	US-PGPUB; USPAT	3/1/05
44	((cross\$1talk or (cross adj talk) or noise) near "between") and (257/443.ccls.)	US-PGPUB; USPAT	3/1/05
2	5929499	US-PGPUB; USPAT	3/1/05

4	738847	DERWENT	3/1/05
11	S277 not (S275 or S273 or S272)	US-PGPUB; USPAT	3/2/05
0	S275 not (S273 or S272)	US-PGPUB; USPAT	3/2/05
8	S273 not S272	US-PGPUB; USPAT	3/2/05
9	S270 not S252	US-PGPUB; USPAT	3/2/05
21	S268 not S252	US-PGPUB; USPAT	3/2/05
45	S264 and ("257"/\$3.ccls.) or ("438"/\$3.ccls.)	US-PGPUB; USPAT	3/2/05
20	S256 not S252	US-PGPUB; USPAT	3/2/05
8	S253 not S252	US-PGPUB; USPAT	3/2/05
1	S250 and ((back\$1side or (back adj side)) with (mask or masked or masking or resist o	US-PGPUB; USPAT	3/2/05
16	S248 not S247	US-PGPUB; USPAT	3/2/05
11	S246 and ((through\$1hole or (through adj hole)) with (chip or wafer or substrate))	US-PGPUB; USPAT	3/2/05
3	S238 and ((circular or annular or concentric) with (anode or cathode) not (guard or gua	US-PGPUB; USPAT	3/2/05
11	S234 not S233	US-PGPUB; USPAT	3/2/05
0	S231 and schottky	US-PGPUB; USPAT	3/2/05
9	S231 and ("250"/\$3.ccls.) or ("257"/\$3.ccls.) or ("438"/\$3.ccls.)	US-PGPUB; USPAT	3/2/05
11	S231 and ((photo\$1detector or ((photo or light or image or radiation) adj (detector or d	US-PGPUB; USPAT	3/2/05
0	S226 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s	US-PGPUB; USPAT	3/2/05
20	S226 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s	US-PGPUB; USPAT	3/2/05
12	S222 and schottky	US-PGPUB; USPAT	3/2/05
0	S222 and (ring with (anode or cathode) not (guard or guarding))	US-PGPUB; USPAT	3/2/05
3	S217 not S215	US-PGPUB; USPAT	3/2/05
6	S210 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s	US-PGPUB; USPAT	3/2/05
2	S205 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s	US-PGPUB; USPAT	3/2/05
37	S204 not S199	US-PGPUB; USPAT	3/2/05
19	S198 and schottky	US-PGPUB; USPAT	3/2/05
0	S198 and (solar.ab.)	US-PGPUB; USPAT	3/2/05
2	S195 and schottky	US-PGPUB; USPAT	3/2/05
19	S189 not S185	US-PGPUB; USPAT	3/2/05
0	S187 not S185	US-PGPUB; USPAT	3/2/05
25	S186 and cathode and anode	US-PGPUB; USPAT	3/2/05

17	S185 and cathode and anode	US-PGPUB; USPAT	3/2/05
17	S184 and cathode and anode	US-PGPUB; USPAT	3/2/05
0	S176 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/2/05
35	S173 not S169	US-PGPUB; USPAT	3/2/05
3	S173 and schottky	US-PGPUB; USPAT	3/2/05
1	S170 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/2/05
20	S168 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/2/05
5	S166 not S165	US-PGPUB; USPAT	3/2/05
5	S152 and (photo\$1detector or (photo adj detector))	US-PGPUB; USPAT	3/2/05
11	5494833 "5541438"	US-PGPUB; USPAT	3/2/05
1	20040222482 and (mask)	US-PGPUB; USPAT	3/2/05
1	20040222482 and (cathode or anode or electrode)	US-PGPUB; USPAT	3/2/05
0	((through\$1hole) with (doped or doping or dopant or impurity or dope)) and (@ad<"20	US-PGPUB; USPAT	3/2/05
0	((through\$1hole) near3 (doped or doping or dopant or impurity or dope)) and (@ad<"2	US-PGPUB; USPAT	3/2/05
0	((through\$1hole) near2 (doped or doping or dopant or impurity or dope)) and (@ad<"2	US-PGPUB; USPAT	3/2/05
6	((through\$1hole) near2 (doped or doping or dopant or impurity or dope)) and (@ad<"2	US-PGPUB; USPAT	3/2/05
0	((through\$1hole) near (doped or doping or dopant or impurity or dope)) and (@ad<"20	US-PGPUB; USPAT	3/2/05
1	((through\$1hole) near (doped or doping or dopant or impurity or dope)) and (@ad<"20	US-PGPUB; USPAT	3/2/05
4	((hole) with (doped or doping or dopant or impurity or dope) with side) and (@ad<"20	US-PGPUB; USPAT	3/2/05
1	((hole) near (doped or doping or dopant or impurity or dope)) and (@ad<"20040311" o	US-PGPUB; USPAT	3/2/05
22	((hole or through\$1hole or via\$1hole) with (anode or cathode) not electron) and S255	US-PGPUB; USPAT	3/2/05
4	((front\$1side or front or top or top\$1side) with ("p+" or "p.sup.+") and S180	US-PGPUB; USPAT	3/2/05
30	((front\$1side or front or top or top\$1side) with ("p+" or "p.sup.+") and (@ad<"2004031	US-PGPUB; USPAT	3/2/05
38	((front\$1side or ((front or top) adj (surface or side)) or top\$surface or top\$1side or fr	US-PGPUB; USPAT	3/2/05
88	((front\$1side or ((front or top) adj (surface or side)) or top\$surface or top\$1side or fr	US-PGPUB; USPAT	3/2/05
7	((front\$1side or ((front or top) adj (surface or side)) or top\$surface or top\$1side or fr	US-PGPUB; USPAT	3/2/05
1	((back\$1side or back) with anode with cathode) and S183	US-PGPUB; USPAT	3/2/05
0	((back\$1side or (back adj side)) with anode with cathode) and (solar.ab.)	US-PGPUB; USPAT	3/2/05
4	((back\$1side or (back adj side)) with anode with cathode) and (@ad<"20040311" or @	US-PGPUB; USPAT	3/2/05
2	((back\$1side or (back adj side)) with anode with cathode) and ((front\$1side or ((fr	US-PGPUB; USPAT	3/2/05
3	((back\$1side or (back adj side)) with anode with cathode) and ((front\$1side or ((fr	US-PGPUB; USPAT	3/2/05

3	((back\$1side or (back adj side)) with anode with cathode) and ((front\$1side or ((front o US-PGPUB; USPAT	3/2/05
3	((back\$1side or (back adj side)) with anode with cathode) and ((front\$1side or ((front o US-PGPUB; USPAT	3/2/05
36	((back\$1side or (back adj side)) with (contact or electrode or bump or pad or anode or . US-PGPUB; USPAT	3/2/05
4	((back\$1side or (back adj side)) with (contact or electrode or bump or pad or anode or . US-PGPUB; USPAT	3/2/05
4	((back\$1side or (back adj side)) with (contact or electrode or bump or pad or anode or . US-PGPUB; USPAT	3/2/05
5	((back\$1side or (back adj side)) with (contact or electrode or bump or pad)) and S258 US-PGPUB; USPAT	3/2/05
23	((back\$1side or (back adj side)) with (anode or cathode)) and S255 US-PGPUB; USPAT	3/2/05
11	((back\$1side or (back adj side)) with (anode or cathode)) and ((257/458,656.ccls.)) US-PGPUB; USPAT	3/2/05
4	((257/458,656.ccls.)) and ((back\$1side or (back adj side)) with (mask or masked or ma US-PGPUB; USPAT	3/2/05
5	((257/458,656.ccls.)) and ((back\$1side or (back adj side)) with ("p+" or "p.sup.+")) and US-PGPUB; USPAT	3/2/05
9	((257/458,656.ccls.)) and ((back\$1side or (back adj side)) with ("p+" or "p.sup.+")) and (US-PGPUB; USPAT	3/2/05
1	((photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sei US-PGPUB; USPAT	3/2/05
33	((photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sei US-PGPUB; USPAT	3/2/05
20	S294 not S293 US-PGPUB; USPAT	3/3/05
24	S288 and ((through\$1hole or (through adj hole)) US-PGPUB; USPAT	3/3/05
0	S288 and ((ring with (cathode or anode) not (guard or guarding)) US-PGPUB; USPAT	3/3/05
4	S288 and ((undoped or intrinsic) with (hole)) US-PGPUB; USPAT	3/3/05
0	S288 and ((undoped or intrinsic) with (anode or cathode)) US-PGPUB; USPAT	3/3/05
1	S288 and ((through\$1hole or (through adj hole)) with (anode or cathode)) US-PGPUB; USPAT	3/3/05
30	S288 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s US-PGPUB; USPAT	3/3/05
5	S284 not S283 US-PGPUB; USPAT	3/3/05
26	S279 not S280 US-PGPUB; USPAT	3/3/05
15	S210 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1s US-PGPUB; USPAT	3/3/05
11	6111299 "5831322" "5757057" US-PGPUB; USPAT	3/3/05
15	((pin with (photo\$1detector or ((photo or light or image or radiation) adj (detector or dio US-PGPUB; USPAT	3/3/05
15	((pin with (photo\$1detector or ((photo or light or image or radiation) adj (detector or dio US-PGPUB; USPAT	3/3/05
28	((pin with (photo\$1detector or ((photo or light or image or radiation) adj (detector or dio US-PGPUB; USPAT	3/3/05
4	((array or matrix) with wafer with (photo\$1detector or ((photo or light or image or radia US-PGPUB; USPAT	3/3/05
17	((array or matrix) with (photo\$1detector or ((photo or light or image or radiation) adj (d US-PGPUB; USPAT	3/3/05
1	((array or matrix) with (photo\$1detector or ((photo or light or image or radiation) adj (d US-PGPUB; USPAT	3/3/05
9	((array or matrix) with (photo\$1detector or ((photo or light or image or radiation) adj (d US-PGPUB; USPAT	3/3/05

6	udt.as.	US-PGPUB; USPAT	3/5/05
12	S423 and (substrate or wafer or chip or die).clm.	US-PGPUB; USPAT	3/5/05
36	S422 not (S413 or S396 or S392 or S386 or S385 or S379 or S359 or S352 or S339 or S339 or US-PGPUB; USPAT	3/5/05	
36	S419 not (S413 or S396 or S392 or S386 or S385 or S379 or S359 or S352 or S339 or S339 or US-PGPUB; USPAT	3/5/05	
36	S418 and (@ad<"20040311" or @r1ad<"20040311")	US-PGPUB; USPAT	3/5/05
1	S416 and S410	US-PGPUB; USPAT	3/5/05
1	S416 and (257/458.ccls.)	US-PGPUB; USPAT	3/5/05
0	S416 and (257/291.ccls.)	US-PGPUB; USPAT	3/5/05
27	S414 and (@ad<"20040311" or @r1ad<"20040311")	US-PGPUB; USPAT	3/5/05
27	S413 not (S396 or S392 or S386 or S385 or S379 or S359 or S352 or S339 or S333 or S333 or US-PGPUB; USPAT	3/5/05	
21	S410 and (257/458.ccls.)	US-PGPUB; USPAT	3/5/05
4	S410 and (257/291.ccls.)	US-PGPUB; USPAT	3/5/05
3	S410 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip or US-PGPUB; USPAT	3/5/05	
4	S410 and ((back\$1side or (back adj side) or bottom or back) with (substrate or wafer o US-PGPUB; USPAT	3/5/05	
2	S405 and S390	US-PGPUB; USPAT	3/5/05
2	S405 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip o US-PGPUB; USPAT	3/5/05	
3	S405 and ((back\$1side or (back adj side) or bottom or back) with (substrate or wafer o US-PGPUB; USPAT	3/5/05	
2	S396 not (S392 or S386 or S385 or S379 or S359 or S352 or S339 or S333 or S318 or S318 or US-PGPUB; USPAT	3/5/05	
3	S392 not (S386 or S385 or S379 or S359 or S352 or S339 or S333 or S318 or S311 or US-PGPUB; USPAT	3/5/05	
9	S391 and (@ad<"20040311" or @r1ad<"20040311")	US-PGPUB; USPAT	3/5/05
27	S388 not S385	US-PGPUB; USPAT	3/5/05
29	S387 and (@ad<"20040311" or @r1ad<"20040311")	US-PGPUB; USPAT	3/5/05
31	S386 not (S379 or S359 or S352 or S339 or S333 or S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
41	S379 not (S359 or S352 or S339 or S333 or S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
3	S374 and (photo\$1diode or (photo adj diode))	DERWENT	3/5/05
0	S372 not S371	US-PGPUB; USPAT	3/5/05
3	S368 and (((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT	3/5/05	
3	S368 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip o US-PGPUB; USPAT	3/5/05	
7	S365 and S362	US-PGPUB; USPAT	3/5/05
11	S362 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer o US-PGPUB; USPAT	3/5/05	
4	S359 not (S352 or S339 or S333 or S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05

11	S358 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
11	S357 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT		3/5/05
11	S357 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip o US-PGPUB; USPAT		3/5/05
30	S352 not (S339 or S333 or S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
31	S351 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
31	S350 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT		3/5/05
7	S348 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
21	S346 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
0	S343 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT		3/5/05
0	S343 and ((back\$1side or (back adj side) or bottom) near2 (substrate or wafer or chip US-PGPUB; USPAT		3/5/05
7	S342 and ((front\$1side or ((front or top) adj (surface or side)) or top\$1surface or top\$1s US-PGPUB; USPAT		3/5/05
13	S339 not (S333 or S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
13	S338 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT		3/5/05
5	S334 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
5	S333 not (S318 or S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
27	S331 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT	3/5/05
3	S328 not S326	US-PGPUB; USPAT	3/5/05
8	S325 and ((back\$1side or (back adj side) or bottom) with (substrate or wafer or chip c US-PGPUB; USPAT		3/5/05
7	S320 and ((back\$1side or (back adj side) or bottom) near (substrate or wafer or chip US-PGPUB; USPAT		3/5/05
2	S318 not (S311 or S306 or S301)	US-PGPUB; USPAT	3/5/05
3	S314 and ((back\$1side or (back adj side)) with (doped or doping or dopant or impurity US-PGPUB; USPAT		3/5/05
3	S313 and ((back\$1side or (back adj side)) with (doped or doping or dopant or impurity US-PGPUB; USPAT		3/5/05
1	S313 and ((back\$1side or (back adj side) or bottom) near substrate) with (doped or d US-PGPUB; USPAT		3/5/05
12	S313 and ((photo\$1detector or ((photo or light or image or radiation) adj (detector or US-PGPUB; USPAT		3/5/05
9	S311 not (S306 or S301)	US-PGPUB; USPAT	3/5/05
14	S310 and ((back\$1side or (back adj side)) with (doped or doping or dopant or impurity US-PGPUB; USPAT		3/5/05
16	S308 and ((back\$1side or (back adj side) or bottom) near2 (substrate or wafer or chip US-PGPUB; USPAT		3/5/05
8	S308 and ((back\$1side or (back adj side) or bottom) near (substrate or wafer or chip US-PGPUB; USPAT		3/5/05
2	S306 not S301	US-PGPUB; USPAT	3/5/05
5	S305 and ((back\$1side or (back adj side)) with (doped or doping or dopant or impurity US-PGPUB; USPAT		3/5/05
8	S298 and (anode with cathode)	US-PGPUB; USPAT	3/5/05

0	S298 and ((ring or circular or annular or concentric) with (anode or cathode) not (guard US-PGPUB; USPAT	3/5/05
3	S297 and ((back\$1side or (back adj side)) with (doped or doping or dopant or impurity US-PGPUB; USPAT	3/5/05
11	S246 and ((ring or circular or annular or concentric) with (anode or cathode) not (guard US-PGPUB; USPAT	3/5/05
28	ccd and (((back\$1side or (back adj side) or bottom) near (substrate or wafer or chip or US-PGPUB; USPAT	3/5/05
5	5981988 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
18	4814847 "4729963"	US-PGPUB; USPAT
1	257/443.ccls. and S362	US-PGPUB; USPAT
21	257/443.ccls. and (((back\$1side or (back adj side) or bottom) with (substrate or wafer US-PGPUB; USPAT	3/5/05
6	11017589 "06045576" "2001119010" "10282243" "10012851" "2001078099"	JPO
7	073333348 "10223873" "2001291892" "06163968" "04241458" "05150049"	DERWENT
6	073333348 "10223873" "2001291892" "06163968" "04241458" "05150049"	JPO
8	(electrode with (through\$1hole or (through adj hole)) and (257/458.ccls.)	US-PGPUB; USPAT
15	(electrode with (hole) not electron) and (257/458.ccls.)	US-PGPUB; USPAT
17	(257/463.ccls.) and ((back\$1side or (back adj side) or bottom) with (substrate or wafer US-PGPUB; USPAT	3/5/05
0	(257/458,459.ccls.) and ((back\$1side or (back adj side) or bottom) with (substrate or w US-PGPUB; USPAT	3/5/05
0	(257/431.ccls.) and ((back\$1side or (back adj side) or bottom) with (substrate or wafer US-PGPUB; USPAT	3/5/05
2	(257/414.ccls.) and ((back\$1side or (back adj side) or bottom) with (substrate or wafer US-PGPUB; USPAT	3/5/05
6	((back\$1side or (back adj side)) with anode with cathode) and ((front\$1side or ((front o US-PGPUB; USPAT	3/5/05
20	((back\$1side or (back adj side)) with (contact or electrode or bump or pad or anode or US-PGPUB; USPAT	3/5/05
33	((back\$1side or (back adj side) or bottom) with ("p+" or "p.sup.+")) and (((back\$1side o US-PGPUB; USPAT	3/5/05
19	((back\$1side or (back adj side) or bottom) with ("p+" or "p.sup.+")) and (257/458.ccls.; US-PGPUB; USPAT	3/5/05
43	((back\$1side or (back adj side) or bottom or back) with ("p+" or "p.sup.+")) and S410 US-PGPUB; USPAT	3/5/05
4	("4760273" "4878102" "5029321" "5555520").PN.	US-PGPUB; USPAT; USOC3/5/05
7	("4327475" "4482907" "4617586" "5029321" "5055900" "5400210" "5495395").F US-PGPUB; USPAT; USOC3/5/05	3/5/05
4	("20040222482" "20040222358" "6340831" "6043550").did. and ((back\$1side or (back US-PGPUB; USPAT	3/5/05
3	("20030054585" "5067985" "6066510").PN.	US-PGPUB; USPAT; USOC3/5/05
2	(solar) and S395	US-PGPUB; USPAT
3	(pin with wafer with (photo\$1detector or ((photo or light or image or radiation) adj (det US-PGPUB; USPAT	3/5/05
37	(photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05
37	(photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05
2	(photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05

8	((photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05
9	(photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05
4	(photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or sen US-PGPUB; USPAT	3/5/05
11	((photo\$1detector or ((photo or light or image or radiation) adj (detector or diode or se US-PGPUB; USPAT	3/5/05
2	4720627	3/5/05
14	4131984	3/5/05
1	S471 not S469	US-PGPUB; USPAT
17	S459 and ((chip or water or substrate).clm.)	US-PGPUB; USPAT
12	S453 not (S450 or S444)	US-PGPUB; USPAT
16	S452 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
13	S450 not S444	US-PGPUB; USPAT
43	S449 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
9	S447 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
9	S446 not S443	US-PGPUB; USPAT
18	S444 not citrus	US-PGPUB; USPAT
30	S443 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
1	S441 and ((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illumii US-PGPUB; USPAT	3/10/05
5	S441 and (((top or front) adj (illuminated or illumination or illuminate)))	US-PGPUB; USPAT
0	S437 and ((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illumii US-PGPUB; USPAT	3/10/05
1	S437 and ((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illumii US-PGPUB; USPAT	3/10/05
36	S421 and (@ad<"20040311" or @riad<"20040311")	US-PGPUB; USPAT
11	((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illuminated or to US-PGPUB; USPAT	3/10/05
31	((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illuminated or to US-PGPUB; USPAT	3/10/05
44	((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illuminated or to US-PGPUB; USPAT	3/10/05
1	((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illuminated or to EPO; JPO; DERWENT	3/10/05
16	((front\$1illuminated or front\$1illumination or front\$1illuminate or top\$1illuminated or to US-PGPUB; USPAT	3/10/05
4	((back\$1side or (back adj side) or bottom) with ("p+" or "p.sup.+" or p\$1type or (p adj t; US-PGPUB; USPAT	3/10/05
5	((back\$1side or (back adj side) or bottom) with ("n+" or "n.sup.+" or n\$1type or (n adj t; US-PGPUB; USPAT	3/10/05
4	((back\$1side or (back adj side) or bottom) with ("n+" or "n.sup.+" or n\$1type or (n adj t; US-PGPUB; USPAT	3/10/05
4	((back\$1side or (back adj side) or bottom) with ("n+" or "n.sup.+" or n\$1type or (n adj t; US-PGPUB; USPAT	3/10/05
6	S488 not S487	US-PGPUB; USPAT
		3/11/05

12	S483 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/11/05
12	S482 not S478	US-PGPUB; USPAT	3/11/05
35	S480 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/11/05
16	S477 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/11/05
1	S472 not S470	US-PGPUB; USPAT	3/11/05
4	5889313 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/11/05
35	4618380 "4472728"	US-PGPUB; USPAT; USOC	3/11/05
6	((both) with (mask or masked or masking) with (impurity or doped or dopant or doping	US-PGPUB; USPAT	3/11/05
27	((back\$1side or (back adj side) or bottom) with (mask or masked or masking) with (imp	US-PGPUB; USPAT	3/11/05
16	((back\$1side or (back adj side) or bottom) with (mask or masked or masking) with (imp	US-PGPUB; USPAT	3/11/05
4	((back\$1side or (back adj side) or bottom) with ("p+" or "p.sup.+" or p\$1type or (p adj	US-PGPUB; USPAT	3/11/05
7	("4472728" "4618380" "5027182" "5332903" "5448082" "5466954" "5552596")	US-PGPUB; USPAT; USOC	3/11/05
8	("4079405" "4616247" "4857980" "5040039" "5252851" "5315148" "5418396"	US-PGPUB; USPAT; USOC	3/11/05
8	4451842	US-PGPUB; USPAT	3/11/05
7	S543 and (("257"/\$3.ccls.) or ("438"/\$3.ccls.))	US-PGPUB; USPAT	3/14/05
13	S540 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
2	S534 not S532	US-PGPUB; USPAT	3/14/05
0	S531 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
13	S531 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
12	S531 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
7	S528 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/14/05
7	S526 and (@ad<"20040311" or @rlad<"20040311")	US-PGPUB; USPAT	3/14/05
0	S517 not S515	US-PGPUB; USPAT	3/14/05
2	S516 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
2	S516 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
2	S514 and (photo\$1detector or ((photo or light or image or radiation) adj (detector or di	US-PGPUB; USPAT	3/14/05
24	S511 not (S505 or S504)	US-PGPUB; USPAT	3/14/05
22	S506 and (("257"/\$3.ccls.) or ("438"/\$3.ccls.))	US-PGPUB; USPAT	3/14/05
36	S505 not S504	US-PGPUB; USPAT	3/14/05
18	S501 not S499	US-PGPUB; USPAT	3/14/05
8	6510195 "6426991"	US-PGPUB; USPAT	3/14/05

1	20040222482 and (mask or masked or masking)	US-PGPUB; USPAT	3/14/05
11	(peter and bui).in.	US-PGPUB; USPAT	3/14/05
7	((back\$1side or (back adj side)) with p\$1type) and S522	US-PGPUB; USPAT	3/14/05
6	((back\$1side or (back adj side)) with p\$1type) and S498	US-PGPUB; USPAT	3/14/05
7	((back\$1side or (back adj side)) with (front\$1side or (front adj side)) with (photo\$1dete	US-PGPUB; USPAT	3/14/05
43	((back\$1side or (back adj side)) with (contact or electrode)) and S498	US-PGPUB; USPAT	3/14/05
27	((back\$1side or (back adj side)) with (contact or electrode or pad) and S509	US-PGPUB; USPAT	3/14/05
7	((back\$1side or (back adj side)) with (contact or electrode or pad or ball or bump)) anc	US-PGPUB; USPAT	3/14/05
27	((back\$1side or (back adj side)) with (contact or electrode or pad or ball or bump)) anc	US-PGPUB; USPAT	3/14/05
25	((back\$1side or (back adj side) or bottom) with (mask or masked or masking) with (imp	US-PGPUB; USPAT	3/14/05
3	((back\$1side or (back adj side) or bottom) with (mask or masked or masking) with (imp	US-PGPUB; USPAT	3/14/05
2	("6510195" "6426991").pn.	US-PGPUB; USPAT	3/14/05
5	("5021854" "5757057" "5773829" "6025585" "6172370").PN.	US-PGPUB; USPAT; USOC	3/14/05
2	("4903103" "4914301").PN.	US-PGPUB; USPAT; USOC	3/14/05
23	("4783695" "4835704" "4836435" "4878991" "4897153" "4930216" "4933042"	US-PGPUB; USPAT; USOC	3/14/05
26	("4783695" "4835704" "4836435" "4878991" "4897153" "4930216" "4933042"	US-PGPUB; USPAT; USOC	3/14/05
6	("20020011639" "4638165" "5477075" "5592523" "5801430" "6025585").PN.	US-PGPUB; USPAT; USOC	3/14/05
8	(wafer with photo\$1diode with package) and (@ad<"20040311" or @r1ad<"20040311";	US-PGPUB; USPAT	3/14/05
44	(wafer with (photo\$1detector or ((photo or light or image or radiation) adj (detector or	US-PGPUB; USPAT	3/14/05
39	(spectrometer.ab.) and (("257"/\$3.cor.) or ("438"/\$3.cor.) and (@ad<"20040311" or @	US-PGPUB; USPAT	3/14/05
2	("6002163" "5888884").pn.	US-PGPUB; USPAT	3/14/05
4	6510195	US-PGPUB; USPAT	3/14/05
2	5929499	US-PGPUB; USPAT	3/14/05
28	5021854	US-PGPUB; USPAT; USOC	3/14/05